**2.1 The Slope of tangent lines (Rates of change)**

1. Explain the 3 cases in which the slope of a function cannot be determined

2. Explain what differentiability means.

3. Explain the relationship between continuity and differentiability.

**For the following, sketch the graph and visually estimate the slope of the tangent line at the given point.**

4. at x = 0 5. at x = 2

6. at x = 1 6. at x = -1

**For the following, find the equation for the derivative by the limit process.**

7. 8.

9. 10.